REMARKS

Non-elected Claims 19, 23-25, 27, and 30-32 have been canceled. Applicants hereby request rejoinder of the non-elected species upon allowance of a generic claim.

Claims 1, 6-12, 15, 17, 18, 20-22, 26, 28, and 29 stand rejected under 103(a) as being unpatentable over Allen et al. (Allen), U.S. Patent No. 6,057,961. The Examiner states that:

> "Allen discloses an optical film which exhibits increased gain at non-normal angles of incidence and which comprises a disperse phase of polymeric particles disposed within a continuous matrix. The film is stretch oriented in one or more directions. The size and shape of the disperse phase particles, the volume fraction of the disperse phase, and the film thickness are chosen to attain a desired degree of diffuse reflection and total transmission of electromagnetic radiation of a desired wavelength in the resulting film. In some embodiments, the materials of the continuous and disperse phases may be chosen so that the interface between the two phases will be sufficiently weak to result in microvoiding when the film is oriented. The average dimensions of the voids may be controlled through careful manipulation of processing parameters and stretch ratios, or through selective use of compatibilizers."

Applicants respectfully traverse this rejection. An increase of gain at non-normal angles has no relationship to color variation as measured by color temperature. Applicants' optical film changes the color temperature of the light exiting the film as a function of angle <u>to even out the color temperature produced by backlight system</u>, producing an average weight balanced color temperature variation of between 5 and 20K over the film surface. Color temperature is defined on the enclosed page 23 of <u>Color and its Reproduction</u> by Gary Field. It is inconsequential for weight-balanced color temperature if more light exits the film at non-normal angle to create increased gain, because, if the color temperature varies as a function of angle, the viewer of the display will still see an undesirable color shift when viewing the display off axis. Applicants'

film reduces the color temperature variation over every angle of the display.

Allen states that the Allen optical film does not change the color of the light exiting the optical film compared to the light entering the film. He states at Column 5/ lines 28-34 that the optical film with a continuous phase and discontinuous phase has an anti-reflection layer. This creates films that

"exhibit a flat transmission curve <u>as a function of the wavelength of light</u>, which tend to minimize any changes in color to a resultant display device into which the reflective polarizer is incorporated."

Therefore, the color of the light into the film equals the color of the light exiting the film and Allen's film does not make any adjustments to achieve leveling. Furthermore, Allen discusses Examples 131 through 133 (perpendicular transmission spectra presented in figure 7) in column 47/ lines 49-59 stating,

> one skilled in the art will appreciate that a film exhibiting a flat transmission curve as a function of the wavelength of light will minimize any changes in color to a resultant display device into which the reflective polarizer might be incorporated.

Thus, Allen teaches away from an optical film that would alter the color temperature of light exiting the film and Allen's film would not serve to even out the color from the backlight.

The Examiner states that Allen also teaches that the size and shape of the disperse phase particles, and the volume fraction of the disperse phase and the film thickness are chosen to attain a desired degree of diffuse reflection and total transmission of electromagnetic radiation of a desired wavelength in the resulting film. The applicants respectfully disagree. Allen discloses the use of microvoids in Col 22 lines 4-14 stating that

> "the materials of the continuous and disperse phases may be chosen so that the interface between the two phases will be sufficiently weak to result in voiding when the film is oriented. The average dimensions of the voids may be controlled through careful manipulation of processing parameters and stretch ratios, or

> through selective use of compatiblizers. The voids may be back-filled in the finished product with a liquid gas, or solid. Voiding may be used in conjunction with the aspect ratios and refractive indices of the disperse and continuous phases to produce desirable optical properties in the resulting film."

This statement supports the use of microvoids to control some optical properties of the resulting optical film, but does not enable one skilled in the art to practice using voids in the film to create the Applicants' invention of a low color temperature variation because optical properties of the voids were not taught, nor how to select values for the multiplicity of parameters (first polymer, second polymer, compatibilizer, disperse phase thickness, disperse phase size in x and y direction, aspect ratio of aspect ratio, thickness of film, number of layers, etc) to obtain the desired optical properties. One having ordinary skill in the art would have to perform undue and extensive experimentation in order to determine the proper parameters for the desired transmission, diffuse transmission efficiency, and color temperature variation because Allen does not teach how the parameters effect the voiding and the optical performance of the resulting film. In summary, Allen represents a shotgun disclosure of a variety of general teachings, many not enabled and does not suggest the parameters of the present claims for any purpose, particularly for reducing the color variation emanating from the backlight.

In view of the foregoing remarks, it is respectfully requested that the rejections under 35 USC 103(a) be reconsidered and withdrawn and that a Notice of Allowance be issued in this application.

Respectfully submitted,

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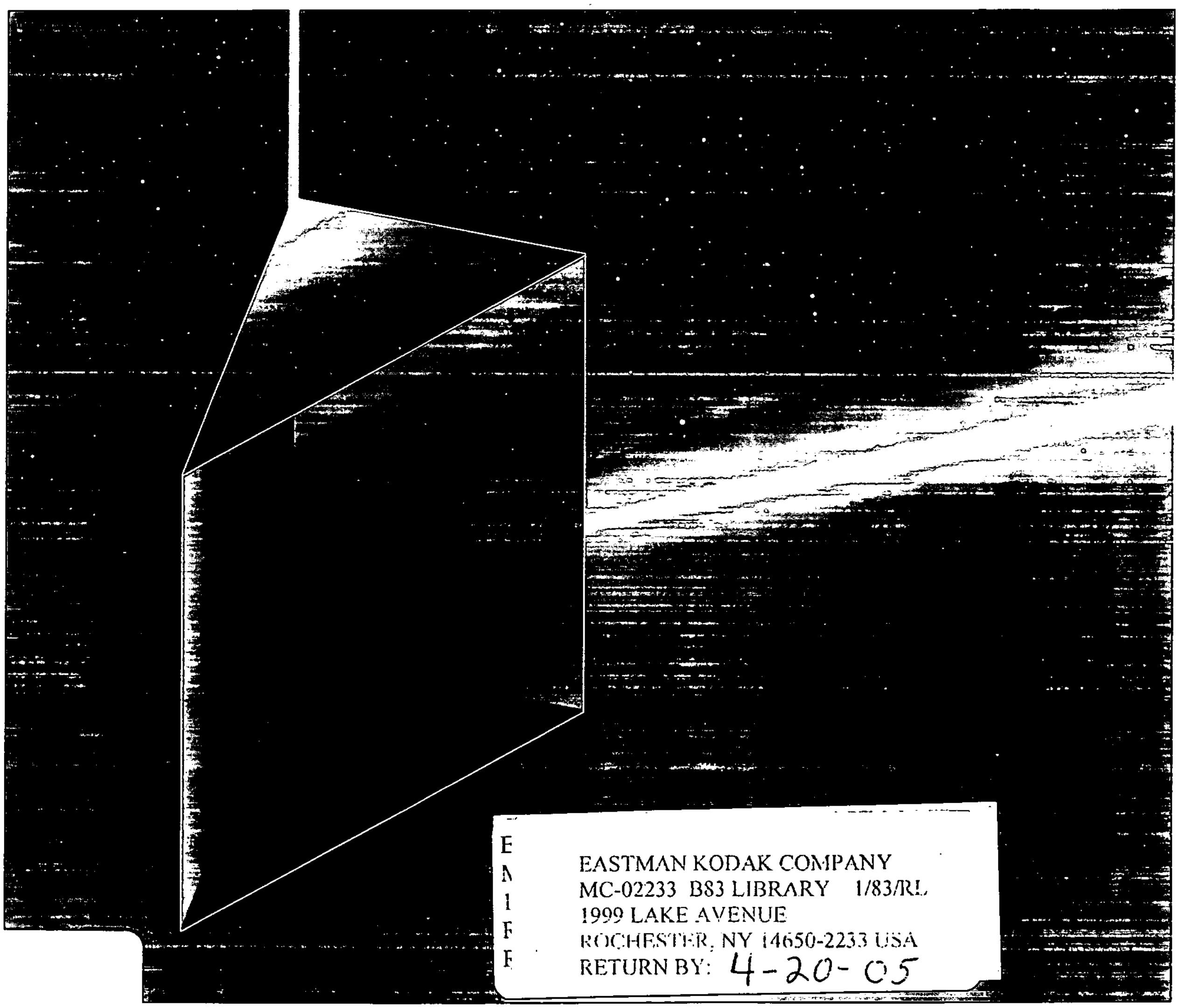
Enclosure: Definition of Color Temerature

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.

COLOR AND ITS REPRODUCTION



Arts Technical Foundation

GATF

Color and Its Reproduction

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Library of Congress Catalog Card Number: 86-82528
International Standard Book Number: 0-88362-088-X

Printed in the United States of America

Order No. 1430
Reprinted in 1992 with Minor Revisions

A catalog of GATF text and reference books, Learning Modules, audiovisuals, and videotapes may be obtained on request from the Graphic Arts Technical Foundation at the address given at the bottom of the title page.

2 The Perception of Color

Color is not simply a physical phenomenon dependent on the sample and illuminant. It is essentially a complex visual sensation, influenced by physiological and psychological factors that probably make one person's perception of color slightly different from another's. To understand the sensation of color, it is necessary to examine the illuminant, the characteristics of the sample, and the human factors, physiological and psychological.

The Light Source

Printed matter is viewed under all forms of illumination, including tungsten light, fluorescent light, a wide range of daylight and sunlight, and mercury vapor or similar discharge lamps. In addition, color separations are made with such illuminants as pulsed-xenon or tungsten-halogen lamps. The factors that determine the characteristics of illuminants include color temperature, intensity, color rendering properties, and degree of diffusion.

Color Temperature

The **color temperature** of a light source is a measure of the integrated spectral energy distribution of that source. The standard for measuring color temperature is a black body radiator that is heated. As the heat is increased, the color of the radiator changes from red hot to white hot. The temperature, in degrees Celsius, is recorded for each given energy distribution; hence, a given temperature reading correlates with a particular color. The temperature reading is expressed in the Kelvin (K) scale (the same as the Absolute scale), which equals the Celsius reading plus 273°.

Correlated color temperatures of natural and artificial illuminants

Natural illumination	**Color Temperature (K)**
Clear blue sky, midday	12,000–26,000
Overcast sky, midday	6,700–7,000
Noon sunlight plus light from a clear blue sky	6,100–6,500
Noon sunlight on a clear day	5,400–5,800
Sunlight at sunset	2,000
Artificial illumination	
Metal halide	4,300–6,750
Xenon	5,290–6,000
Carbon arc	5,000
Fluorescent	3,000–6,500
Tungsten	2,650–3,400